**IQRA NATIONAL UNIVERSITY**

Computed Radiography & Digital Radiography

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## Describe ten advantages of digital radiography over screen film radiography.

Ans : Digital radiography advantages:

the benefits of upgrading from analog to digital radiography go well beyond the reduction in time required to produce the X-ray image themselves.

>Reduced Radiation

>Reduced cost due to the elimination of chemical processors, processor mentanence, and filing and mailing jackets.

>Reduce space requirement, No dark room is required and the need to dedicate space for cabinet of analog image is eliminated.

>Greater image versatility,

>lightening or darkening.

>Zoom in or out.

>rotating.

>Flipping

>inverting

## 2. Differentiate between direct digital radiography and indirect digital Radiography.

Ans: Direct digital radiography:

Detection system use a photo conductor material usually selenium applied on top of a thin film transistor array,

Indirect digital radiography:

Indirect system use an x-ray intensifying screen that converts x-rays to light which is then detected by the flat panel detector

## 3. Why is fill factor important?

Ans: the fill factor ff is an important parameter that determines the power conversion efficiency of an organic solar cell, there are several factors interacted with each other very intricately due to this reason a deep understanding of ff is quite difficult.

## 4. what are the consequences of producing flat panel digital image receptors with smaller pixels?

Ans: the consequences of producing flat panel digital image receptors with small pixels are noisy image what is meant by limited spatial resolution most vendors identify the spatial frequency associated with the 0.1 mtf as the limiting spatial resolution expressed in lp/mm.

# 5.Discuus the relevant features of a storage phosphor imaging plate.

Ans: phosphor storage imaging to convert an image into digital so that in to turn can be processed by a computer pixel phosphor storage imaging digital radiology .